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PATENT COOPERATION TREATY

PCT

REC'D 16 AUG 2004 WIPO PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference					
OPP021038KR	FOR FURTHER ACTION		ification of Transmittal of International Preliminary ation Report (Form PCT/IPEA/416)		
International application No.	International filing date (day/mo	nth/year)	Priority Date (day/month/year)		
PCT/KR 2003/000634	28 March 2003 (28.03.2	2003)	18 April 2002 (18.04.2002)		
International Patent Classification (IPC) or nat	ional classification and IPC				
IPC ⁷ : C08G 77/06			•		
Applicant					
LG CHEM, LTD.					
This international preliminary exar	nination report has been		international Preliminary Examination Authority		
and is transmitted to the applicant	according to Article 36.	ired by this i	nternational Preliminary Examination Authority		
2. This REPORT consists of a total of	f 4 sheets, including	g this cover	sheet.		
This report is also accompan	nied by ANNEXES, i.e., sheet	s of the desc	ription, claims and/or drawings which have been		
amended and are the basis to	This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).				
	Tariamonante mondellons	inder the FC	· 1).		
These annexes consist of a total of	sheets.				
3. This report contains indications rela	ting to the following items:	· ·			
I. Basis of the opini	on		•		
II. Priority					
III. Non-establishmer	t of opinion with regard to no	velty, invent	tive step and industrial applicability		
IV. Lack of unity of i					
V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability.					
citations and exp	citations and explanations supporting such statement				
VI. Certain documents cited					
VII. Certain defects in the international application					
VIII. Certain observation	ns on the international applica	ation			
Date of submission of the demand	Date	of completi	on of this report		
18.11.2003			July 2004 (28.07.2004)		
		20	(20.07.2004)		
Name and mailing address of the IPEA/A	Γ Auth	orized office	er		
Austrian Patent Office			DA4.0.40.01.4.51. =		
Dresdner Straße 87 A-1200 Vienna			BAUMSCHABL F.		
Facsimile No. 1/53424/200		ohone No. 1	/53424/459		
Form PCT/IPEA/409 (cover sheet) (July 1					

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/KR 2003/000634

1.		Basis of the report
l.	Wit	h regard to the elements of the international application:*
	\boxtimes	the international application as originally filed
		the description:
		pages, as originally filed
		pages, filed with the demand
		pages, filed with the letter of
		the claims:
		pages, as originally filed
		pages, as amended (together with any statement) under Article 19
1		pages, filed with the demand
ĺ		pages, filed with the letter of
		the drawings:
		pages, as originally filed
İ		pages, filed with the demand
		pages, filed with the letter of
	П	the sequence listing part of the description:
	_	pages, as originally filed
		pages, filed with the demand
		pages, filed with the letter of
2.	With	n regard to the language, all the elements marked above were available or furnished to this Authority in the language in
	whic	th the international application was filed, unless otherwise indicated under this item.
	The	se elements were available or furnished to this Authority in the following language which is:
		the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
		the language of publication of the international application (under Rule 48.3(b)).
	Ц	the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/ or 55.3).
3.	With preli	n regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international iminary examination was carried out on the basis of the sequence listing:
		contained in the international application in printed form.
		filed together with the international application in computer readable form.
		furnished subsequently to this Authority in written form.
	Ш	furnished subsequently to this Authority in computer readable form.
		The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
		The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.
4.		The amendments have resulted in the cancellation of:
		the description, pages
		the claims, Nos
		the drawings, sheets/fig
5.		This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**
	Replac n this 10.17)	rement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and
** /	iny re	placement sheet containing such amendments must be referred to under item. I and appeared to this report
For	n PC	T/IPEA/409 (Box I) (July 1998))







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International application No. PCT/KR 2003/000634

velty (N)	C1-:		
• • •	Ciaims	4, 11-18	YES
	Claims	1-3, 5-10	NO
ventive step (IS)	Claims		YES
	Claims	1 - 18	NO
dustrial applicability (IA)	Claims	1 - 18	YES
	Claims		NO
	ventive step (IS) dustrial applicability (IA)	Claims Claims dustrial applicability (IA) Claims	Claims 1 - 18 dustrial applicability (IA) Claims 1 - 18

US 5548053 A relates to a process for the preparation of organopolysiloxan resins. According to column 3, line 15 – column 6, line 35, examples and claims different siloxanes are mixed and treated very similar to the conditions of the method of the present application (claims 1-3 and 5 – 10).

At this point there should be added that the method (especially claim 1) is not clearly specified and may cause some misinterpretations. The technical features (...hydrolysing and condensing the "first mixture" by adding water and catalyst...) are very unspecific. The functions of the "second" and "third mixture" may be interpreted in different ways. Speaking from a "first mixture" is only regarded as useful if there is at least a "second mixture". But the formulation "silane compound being selected from the group consisting of" (a,b,c,d) suggests that "second" and "third mixtures" are only optional compounds. Similar considerations ("first" – third mixture") should be made for claim 11.

US 5656555 A discloses a method of forming a thin film dielectric on a semiconductor substrate. US 5656555 A relates to modified hydrogen silesquioxane resin and modifying agents (e.g. alkyl alkoxysilanes). Combining the state of the art of the subject matter of US 5656555 A with the state of the art of the subject matter of US 5548053 A anticipates the inventiveness of the subject matter of the present application according to claims 11 to 18.

Therefore the subject matter of the present application according to claims 1-3 and 5-10 is not regarded to be new. The oxidizing step of the hydrosilane compound (claim 4) is considered to be new but not to be inventive alone.

GB 627800 A (page 2, lines 12-65, examples, claims), GB 746193 A (page 3, lines 17-30, claims) and GB 632955 A (page 2, line 109- page 3, line 18) describe methods (hydrolyzation, condensation, oxidation) like the subject matter of the present application (claims 1-3, 5-10).

JP 06248085 A (abstract), JP 05295270 A (abstract) and GB 2125423 A are given to illustrate the further state of the art.



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Internació PCT/K	nal anr	lication	Nο
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PCH/N	1 0001	UUUJ4	

Supplemental Box (To be used when the space in any of the preceding boxes is not sufficient)					
Continuation of: Box V (page 1)					
Industrial applicability is given.					
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·					
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Form PCT/IPEA/409 (Supplemental Box) (July 1998)	, .				